



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/526,540	07/22/2005	Sahbl Belkhiria	05-208	5266

34704 7590 11/24/2006

BACHMAN & LAPOINTE, P.C.
900 CHAPEL STREET
SUITE 1201
NEW HAVEN, CT 06510

EXAMINER

GRAVINI, STEPHEN MICHAEL

ART UNIT	PAPER NUMBER
----------	--------------

3749

DATE MAILED: 11/24/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/526,540

Applicant(s)

BELKHIRIA ET AL.

Examiner

Stephen Gravini

Art Unit

3749

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 July 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2-20 and 22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 2-20 and 22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Priority

Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d). The certified copy has been filed in parent Application No. PCT/EP02/09895, filed on European Patent Office.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claim 13 is rejected under 35 U.S.C. 112, first paragraph, as based on a disclosure which is not enabling. The claimed but not enabled Urshell cutting system construed to be critical or essential to the practice of the invention, but not included in the claim is not enabled by the disclosure. See *In re Mayhew*, 527 F.2d 1229, 188 USPQ 356 (CCPA 1976). Nothing in the specification discusses and Urshell cutting system such that those skilled in the art would enable the claimed invention.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 13 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The claimed Urshell cutting system fails to particularly point out and distinctly claim the subject matter which applicant regards as the invention because it is construed as indefinite term.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 2-6, 10, 14-16 and 22 are rejected under 35 U.S.C. 102(b) as being anticipated by Landolt et al. (US 4,138,539). Landolt is construed to disclose the claimed invention comprising:

carrying out a polymerization reaction in a closed polymerization reactor to form a polymer gel, wherein the polymerization reaction is selected from the group consisting of bulk aqueous solution polymerization and (2) suspension polymerization at column 5 lines 34-52;

drying the resulting polymer gel on a continuously moving bed in a closed dryer at column 5 line 53 through column 6 line 32; and

discharging dried SAP fines at column 6 lines 33-57. Landolt is also construed to disclose the claimed moving bed closed dryer comprises an agitated vessel having at least one agitating shaft 2, wherein the shaft is heated additionally to the vessel to increase the heat transfer and drying efficiency of the dryer, drying of the polymer gel is carried out under at least one of the following conditions vacuum or in the heated air, inert gas, and steam at column 6 line 27, maturity of the polymer, is carried out in a first zone of the closed dryer as shown in the figure, mixing into at least one of the closed polymerization reactor and the closed dryer an additive selected from the group

Art Unit: 3749

consisting of monomers, comonomers solvents, or mixtures thereof at column 1 lines 5-66, recycling to at least one of the closed polymerization reactor and the closed dryer the dried SAP fines as shown in the figure, pressure lock chamber or gel cutting system location between the reactor and dryer or mixer at column 2 lines 11-48 wherein the disclosed pulverizing step is broadly and reasonably construed from the accompanying specification to anticipate the claimed gel cutting or mixer because both features will cut or mix gel.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 7-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Landolt in view of Coville et al. (US 5,891,254). Landolt is construed to disclose the claimed invention, as rejected above, except for the claimed condensing and recycling feature. Coville, another continuous production process of polymers, is construed to

Art Unit: 3749

disclose a condensing and recycling feature at column 9 line 49 through column 10 line 20. It would have been obvious to one skilled in the art to combine the teachings of Landolt with the condensing and recycling feature, construed to be disclosed in Coville for the purpose of separation and recovery of desired processed reactants.

Claims 11-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Landolt. Landolt is construed to disclose the claimed invention, as rejected above, except for the claimed rotary valve or piston lock system associated with the pressure lock chamber and Urshell cutting system. It would have been an obvious matter of design choice to one skilled in the art to provide a rotary valve or piston lock system associated with the pressure lock chamber and Urshell cutting system since the disclosed invention would be performed regardless of the type of pressure device used with the lock chamber.

Claims 17-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Landolt in view of Gill (US 3,573,263). Landolt is construed to disclose the claimed invention, as rejected above, except for the claimed vacuum and partial cooling. Gill, another continuous production process of polymers, is construed to disclose a vacuum and partial cooling feature at column 3 lines 2-34 and as discussed under the background of the invention section of that reference. It would have been obvious to one skilled in the art to combine the teachings of Landolt with the vacuum and partial cooling feature, construed to be disclosed in Gill for the purpose of optimum low pressure processing of polymerization.

Art Unit: 3749

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 2-20 and 22 are rejected on the ground of nonstatutory obviousness-type double patenting over claims 1-6 of U. S. Patent No. 7,045,581. Although the conflicting claims are not identical, they are not patentably distinct from each other because it would have been obvious to one skilled in the art to include SAP since both inventions function with the same structure regardless of whether SAP is claimed.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephen Gravini whose telephone number is 571 272 4875. The examiner can normally be reached on normal weekday business hours (east coast time).

Art Unit: 3749

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Josiah C. Cocks can be reached on 571 272 4874. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

SMG

November 16, 2006

